



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/740,016	12/18/2003	Paul J.G. Van Wulfften Palthe	68.0382	1737

35204 7590 12/29/2005

SCHLUMBERGER RESERVOIR COMPLETIONS
14910 AIRLINE ROAD
ROSHARON, TX 77583

EXAMINER

COY, NICOLE A

ART UNIT	PAPER NUMBER
----------	--------------

3672

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/740,016

Applicant(s)

VAN WULFFTEN PALTHE, PAUL J.G.

Examiner

Nicole Coy

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 29-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 29-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 4, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Achee, Jr. et al. (USP 6,216,785).

With respect to claim 1, Lund discloses a one-trip system for use in a subterranean well comprising: a tubing hanger adapted to be mounted to one of the well and a well casing near the earth's surface (see column 2 lines 53-64); a production tubing sealingly attached to the tubing hanger (see column 2 lines 53-64); a perforating gun assembly coupled to the production tubing (see column 4 lines 30-35); and a screen assembly (see column 4 lines 35-52), wherein the tubing hanger, the production tubing, the perforating gun assembly and the screen assembly are adapted to be run downhole as a unit (see column 1 lines 12-18), and once the unit is positioned downhole the screen assembly is adapted to be moved relative to the production tubing by a riglessly-deployed continuous medium deployed through the production tubing

Art Unit: 3672

from the surface of the well (see column 5 lines 5-21, wherein the valve is part of the screen assembly).

With respect to claim 2, Achee, Jr. et al. discloses a one-trip system further comprising a packer attached to a lower end of the production tubing (see column 5 lines 23-28).

With respect to claim 4, Achee, Jr. et al. discloses a one-trip system further comprising: a surface-controlled subsurface valve located in-line with the production tubing (see numeral 164 and column 8 lines 32-39).

With respect to claim 7, Achee, Jr. et al. discloses a one-trip system further comprising: an upper sliding sleeve valve mounted in-line with the production tubing above the packer (see column 6 lines 40-67).

With respect to claim 8, Achee, Jr. et al. discloses the one-trip system further comprising an extension having an intermediate sliding sleeve valve mounted below the packer (see column 2 lines 27-28).

3. Claims 29-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Lund (USP 6,675,893).

With respect to claim 29, Lund discloses a method to complete a subterranean well in one trip comprising: providing a one-trip completion system (see abstract); placing the one-trip completion system in its proper position in the well using a rig (see column 14 lines 8-16); removing the rig (see column 14 lines 8-16); after the removal of the rig, running a continuous medium downhole into the one-trip completion system

Art Unit: 3672

(see column 14 lines 1-16); and actuating and operating the one-trip completion system using the continuous medium (see column 14 lines 1-19).

With respect to claim 30, Lund discloses that the continuous medium comprises coiled tubing (see column 14 lines 18-19).

With respect to claim 31, Lund discloses that the actuating and operating includes performing a gravel pack operation (see column 14 lines 3-5).

With respect to claim 32, Lund discloses that the actuating and operating includes performing a fracturing operation (see column 14 lines 63-67).

With respect to claim 33, Lund discloses that the actuating and operating includes performing a perforating operation (see column 14 lines 1-2).

With respect to claim 34, Lund discloses that the actuating and operating includes moving a sand exclusion device to a position adjacent perforations in a well casing (see column 4 line 54 to column 5 line 30, wherein filter 32 is a screen which comprises valve 55, which is moved by a wireline).

With respect to claim 35, Lund discloses a method to complete a well in one trip comprising: placing a one-trip completion system in a desired location in the well using a rig (see column 14 lines 1-19), the one-trip completion system having a perforating gun (see column 14 lines 1-2), a sand screen (see column 4 line 54 to column 5 line 30), and production tubing (see column 14 lines 8-15); removing the rig (see column 14 lines 10-15); firing the perforating gun to create perforations in a subsurface formation (see column 14 lines 1-2); after removal of the rig, running a continuous medium downhole to engage the sand screen and move the sand screen to a position adjacent

Art Unit: 3672

the perforations (see column 14 lines 1-20 and column 4 line 54 to column 5 line 30, wherein filter 32 is a screen which comprises valve 55, which is moved by a wireline); pumping gravel outside of and around the sand screen (see column 4 line 54 to column 5 line 30); and producing fluids from the well through the production tubing (see column 14 lines 6-7).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Achee, Jr. et al. in view of Strattan et al. (US 5,211,243).

Achee, Jr. et al. does not a valve located near the earth's surface and mounted about the tubing hanger to control flow of well fluids. Strattan et al. teaches the use of an annular safety valve (100) that can be run into the well in one trip along with other equipment, and suggests that a surface mounted valve is useful in order to prevent blow out in the event of an uncontrollable situation. Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the completion system of George et al. to include the safety valve of Strattan et al. in order to prevent blow out and increase the level of safety during well operations.

Art Unit: 3672

6. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Achee, Jr. et al. in view of Ringgenburg et al. (USP 5,875,852).

Achee, Jr. et al. does not teach an artificial lift device to assist in the production of well fluids; the artificial lift device being an electric submersible pump. Ringgenburg et al. teaches the use of an electric submersible pump in a well completion system, and suggests that a pump is needed to draw fluid from the formation. See figure 2 column 9 lines 52-54. Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the completion apparatus of Achee, Jr. et al. to include the electric submersible pump of Ringgenburg et al. in order to draw fluid from the formation when well pressure is low.

7. Claims 9-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Achee, Jr. et al. in view of Gano et al. (USP 6,382,323).

With regard to claims 9-15 and 17, Achee, Jr. et al. discloses the apparatus as applied to the claims above having a perforating assembly that includes a perforating gun, a firing head, a safety spacer, a sand exclusion device with a sand screen, and an inner string releasably mounted within the interior of the lower completion assembly, but does not teach a selective nipple; a shroud attached to the selective nipple; a no-go nipple mounted to the shroud; the perforating assembly mounted below the no-go nipple; a lock to keep the inner string secured to the selective nipple; a lower sliding sleeve valve; and a configuration in which the inner string can be moved from a first configuration of being mounted to the selective nipple to a second configuration in which

Art Unit: 3672

it is mounted to the no-go nipple. Gano et al. discloses a releasable no-go tool having selective nipple (42), a shroud attached to the selective nipple, a no-go nipple (40) mounted to the shroud (44), a lock (48) to keep the inner string (20) secured to the nipple; and a perforating assembly (24) mounted below the no-go nipple; a lower sliding sleeve valve (54), in which the perforating assembly could be moved from the selective nipple to the no-go structure. Gano et al. suggest that a releasable no-go tool is useful in order to accurately position an item of equipment used in wellbore operations.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the completion assembly of Achee, Jr. et al. to include the releasable no-go tool of Gano et al. in order to maintain the proper orientation of the tool during perforating and fracturing operations.

8. Claims 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Achee, Jr. et al. in view of Gano et al. (USP 6,382,323) in further view of Donnelly et al. (USP 5,901,789).

Achee, Jr. et al. in view of Gano et al. does not teach the use of a sand exclusion device with an expandable element. Donnelly et al. discloses such a device and suggests that an expandable element is useful to ensure a continuous mechanical contact between the screen and formation where there are inconsistencies in wellbore geometry. Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the apparatus of the combined references of Achee, Jr. et al.

Art Unit: 3672

and Gano et al. to incorporate the expandable sand exclusion element of Donnelly et al. in order to further prevent the migration of solid particles into a hydrocarbon wellbore.

9. Claims 9-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Achee, Jr. et al. in view of Shy (USP 6,199,632).

With regard to claims 9-15 and 17, Achee, Jr. et al. discloses the apparatus as applied to the claims above with the lower completion assembly having a perforating assembly that includes a perforating gun, a firing head, a safety spacer, a sand exclusion device with a sand screen, and an inner string releasably mounted within the interior of the lower completion assembly, but fails to teach a selective nipple attached to a lower end of the upper completion assembly; a shroud attached to the selective nipple; a no-go nipple mounted to the shroud; the perforating assembly mounted below the no-go nipple; a lock to keep the inner string secured to the selective nipple; a lower sliding sleeve valve; and a configuration in which the inner string can be moved from a first configuration of being mounted to the selective nipple to a second configuration in which it is mounted to the no-go nipple. Shy discloses a perforating apparatus having a selective nipple (38), a shroud attached to the selective nipple, a no-go nipple (74) mounted to the shroud; a lock (50) to keep the inner string (48) secured to the nipple; a perforating assembly mounted above the no-go nipple; a lower sliding sleeve valve (60); and a configuration in which the inner string can be moved from being mounted at the nipple to being mounted at the no-go nipple. Shy does not show the perforating assembly mounted below the no-go nipple. It is an obvious design choice to reverse

Art Unit: 3672

the configurations to modify the design. (Shy column 12 lines 45-48). Shy suggests that the configuration of components is useful in single trip perforation and fracturing operations to ensure proper alignment of the tool both in an axial and circumferential orientation. Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the completion system of Achee, Jr. et al. to include the locating nipples of Shy in order to maintain the proper orientation of the tool during perforating and fracturing operations. Absent a showing of criticality in the location of the perforating gun in relation to the no-go nipple, the Shy reference meets the limitations of the claims.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Achee, Jr. et al. in view of Shy in further view of Donnelly et al.

The combined reference of Achee, Jr. et al. and Shy teaches the apparatus as applied to the claims above, but fails to teach the use of an sand exclusion device with an expandable element. Donnelly et al. discloses such a device and suggest that an expandable element is useful to ensure a continuous mechanical contact between the screen and formation where there are inconsistencies in wellbore geometry. Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the apparatus of the combined references of Achee, Jr. et al. and Shy to incorporate the expandable sand exclusion element of Donnelly et al. in order to further prevent the migration of solid particles into a hydrocarbon wellbore.

Art Unit: 3672

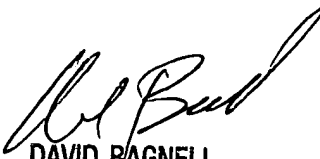
Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole Coy whose telephone number is 571-272-5405. The examiner can normally be reached on M-F 8:00-5:30, 1st F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

nac


DAVID BAGNELL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600